

WHAT IS CLAIMED IS:

1. In an electric power steering apparatus constructed such that a rotational output of a drive source is, as an auxiliary steering torque,  
5 decelerated by a worm gear speed reducer and thus transmitted to a steering shaft so as to assist a steering force applied to a steering wheel, and travelling wheels are thereby steered,  
a power steering apparatus for a vehicle,  
10 comprising:  
cooling means for cooling an interior of a gear chamber of said worm gear speed reducer.
2. A power steering apparatus for a vehicle  
15 according to claim 1, wherein said cooling means is constructed of a cooling fan attached to a worm of said worm gear speed reducer.
3. A power steering apparatus for a vehicle  
20 according to claim 1 or 2, wherein housing of said worm gear speed reducer is provided with a circulation path for circulating the air in said gear chamber.
- 25 4. A power steering apparatus for a vehicle according to claim 1 or 2, wherein said cooling means is constructed of heat radiation fins formed on an

external surface of said housing of said worm gear speed reducer.

5        5. A power steering apparatus for a vehicle  
according to claim 3, wherein said cooling means is  
constructed of the heat radiation fins formed on the  
external surface of said housing of said worm gear  
speed reducer.

Abstract

An electric power steering apparatus is constructed such that a rotational output of a drive source is, as an auxiliary steering torque,  
5 decelerated by a worm gear speed reducer and thus transmitted to a steering shaft so as to assist a steering force applied to a steering wheel, and travelling wheels are thereby steered, wherein the electric power steering apparatus includes cooling  
10 means for cooling an interior of a gear chamber of the worm gear speed reducer by circulating the air within the gear chamber thereof.